

PRODUCT DATASHEET

Wireless Outdoor Multi-Client Bridge/AP/ WDS

NOC-8610 PLUS

2.4 & 5GHz

802.11 a/b/g

54 Mbps

This is a dual-radio High Power and High Gain Access Point/Client Bridge that operates seamlessly in the 2.4 GHz/5 GHz frequency spectrum and the newer, faster 802.11a (5GHz, 54Mbps) and 802.11g (2.4GHz, 54Mbps) wireless standards. It's the best way to add wireless capability to your existing wired network, or to add bandwidth to your wireless installation.

To protect your wireless connectivity, it can encrypt all wireless transmissions through 64/128-bit WEP data encryption and also supports WPA. The MAC address filter lets you select exactly which stations should have access to your network. With the Wireless Multi-Client Bridge/Access Point/WDS, you'll experience the best wireless connectivity available today.



Features	Benefits
High Speed Data Rate Up to 54Mbps	Capable of handling heavy data payloads such as MPEG video streaming
High Output Power up to 40 dBm (with 5 dBi Antenna Gain) for 11b/g and up to 36 dBm (with 16dBi Antenna Gain) for 11a.	Excellent output power spreads the operation distance
IEEE 802.11b/g Compliant	Fully Interoperable with IEEE 802.11b/IEEE802.11g compliant devices
Point-to-point, Point-to-multipoint Wireless Connectivity	Let users transfer data between two buildings or multiple buildings
WPA/WPA2/ IEEE 802.1x support	Powerful data security
WDS (Wireless Distribution System)	Make wireless AP and Bridge mode simultaneously as a wireless repeater
Hide SSID (AP Mode)	Avoids unallowable users sharing bandwidth, increases efficiency of the network
DHCP Client/ Server	Simplifies network administration
Watertight and Weatherproof (IP67)	Avoid water invaded and weather corroded
Wide temperature range and robust mechanical design	Delivers reliable, top performance in the most demanding environments
Power-over-Ethernet (IEEE802.3af Compliant)	Flexible Access Point locations and cost savings

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

11/16/2006

Technical Specifications

Data Rates

1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps

Standards

IEEE802.11a/b/g, IEEE802.3, IEEE802.3u, IEEE802.3af, IEEE802.1f, IEEE802.1x

Compatibility

IEEE 802.11g/ IEEE 802.11b

Power Requirements

Active Ethernet (Power over Ethernet) –48 VDC/0.375A

External Unit: Auto sensing 100/240 VAC; 50/60 Hz

Regulation Certifications

FCC Part 15/UL, ETSI 300/328/CE

RF Information

Frequency Band

802.11a: 5.15~5.25GHz, 5.25~5.35GHz, 5.47~5.725GHz, 5.725~5.825GHz

802.11b/g: U.S., Europe and Japan product covering 2.4 to 2.484 GHz, programmable for different country regulations

Media Access Protocol

Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA)

Modulation Technology

Orthogonal Frequency Division Multiplexing (OFDM)
DBPSK @ 1Mbps
DQPSK @2Mbps
CCK @ 5.5 & 11Mbps
BPSK @ 6 and 9 Mbps
QPSK @ 12 and 18 Mbps
16-QAM @ 24 and 36 Mbps
64-QAM @ 48 and 54 Mbps

Operating Channels

802.11b/g:
11 for North America, 14 for Japan, 13 for Europe, 2 for Spain, 4 for France

802.11a:

US/Canada:12 non-overlapping channel (5.15~5.35GHz, 5.725~5.825GHz)

Europe:19 non-overlapping channel (5.15~5.35GHz, 5.47~5.825GHz)

Japan: 4 non-overlapping channel (5.15~5.25GHz)

China: 5 non-overlapping channel (5.725~5.85GHz)

Receive Sensitivity (Typical)

- 5.15~5.85G(IEEE802.11a)
6Mbps@ -88dBm;
54Mbps@ -70dBm
- 2.412~2.472G(IEEE802.11g)
6Mbps@ -91dBm;
54Mbps@ -74dBm
- 2.412~2.472G(IEEE802.11b)
11Mbps@ -90dBm
1Mbps@ -95dBm

Available transmit power (Typical)

- 5.15~5.24 GHz(IEEE802.11a)
17dBm @6 ~ 24Mbps
17dBm @36Mbps
16 dBm @48Mbps
15 dBm @54Mbps
- 5.26~5.35GHz(IEEE802.11a)
20dBm @6 ~ 24Mbps
18dBm @36Mbps
16 dBm @48Mbps
15 dBm @54Mbps
- 5.745~5.85GHz (IEEE802.11a)
18dBm @6 ~ 24Mbps
16dBm @36Mbps
14 dBm @48Mbps
13 dBm @54Mbps
- 2.412~2.472G(IEEE802.11g)
26dBm @6 ~ 24Mbps
23dBm @36Mbps
22 dBm @48Mbps
21 dBm @54Mbps
- 2.412~2.472G(IEEE802.11b)
up to 26 dBm. @1, 2, 5.5 and 11Mbps

Antenna

802.11a: Embedded patch antenna 16dBi (5GHz)
802.11b/g: SMA connector 5dBi (2.4GHz)

Networking

Topology

Ad-Hoc, Infrastructure

Operation Mode

Point-to-Point/ Point-to-Multipoint
Bridge/ AP/ Client Bridge/ WDS

Interface

Wireless IEEE802.11b/g
One 10/100 RJ-45 port

Security

- IEEE802.1x Authenticator / RADIUS Client (EAP-MD5/TLS/TTLS) Support in AP Mode
- IEEE802.1x Supplicant (EAP-MD5/TLS/TTLS, PEAP) support in Client Bridge Mode
- WPA /WPA2/ Pre Share KEY (PSK) with TKIP/AES
- MAC address filtering (AP only)
- Hide SSID in beacons

IP Auto-configuration

DHCP client/server

Management

Configuration

Web-based configuration (HTTP)
Telnet Configuration
SNMP V1,

Firmware Upgrade

Upgrade firmware via web-browser
Serial Interface (RS-232)
TFTP

Physical

Dimensions (HxWxD)

163.8(L)mm * 135.2(W)mm
* 47.0(H)mm

Weight

1.2 Kg (2.6 lbs)

Environment

Temperature Range

Operating: 0°C to 65
Storage: -40°C to 80°

Humidity (non-condensing)

5%~95% Typical

Package Contents

- Outdoor Wireless Client Bridge unit
- 48V, 0.375A AC/DC adapter with wall-plug power code
- 14dBi Dipole Antenna

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- Inline Power Injector (PoE)
- 1.8m Grounding Cable
- User manual CD-disc
- Wall mounting kit
- Mast mounting kit

Related Product(s)

11b High-power Client Bridge

[2611CB3 PLUS \(Deluxe\)](#)

11b/g Outdoor AP/Client Bridge/
Router

[2511HS PLUS](#)

[2511BG PLUS](#)

[NOC-3220 Series](#)

[NOC-3610 Series](#)

11b/g Outdoor AP-Client

[2611CB5 PLUS](#)

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Wireless Outdoor Multi-Client Bridge/AP/ WDS

NOC-8610 EXT

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802.11 a/b/g

54 Mbps

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Features	Benefits
High Speed Data Rate Up to 54Mbps	Capable of handling heavy data payloads such as MPEG video streaming
High Output Power up to 26 dBm	Excellent output power spreads the operation distance
IEEE 802.11b/g Compliant	Fully Interoperable with IEEE 802.11b/IEEE802.11g compliant devices
Point-to-point, Point-to-multipoint Wireless Connectivity	Let users transfer data between two buildings or multiple buildings
WPA/WPA2/ IEEE 802.1x support	Powerful data security
WDS (Wireless Distribution System)	Make wireless AP and Bridge mode simultaneously as a wireless repeater
Hide SSID (AP Mode)	Avoids unallowable users sharing bandwidth, increases efficiency of the network
DHCP Client/ Server	Simplifies network administration
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RF Connector

SMA (Fr) Type

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